FORM NO. 51-4C
MAR 1952

CLASSIFICATION RESTRICTED
SECURITY INFORMATION
CENTRAL INTELLIGENCE AGENCY
INFORMATION FROM
FOREIGN DOCUMENTS OR RADIO BROADCASTS

REPORT
CD NO.

STAT

COUNTRY	USSR	DATE OF INFORMATION	1952
SUBJECT	Scientific - Electricity, personalities, searchlights		
HOW PUBLISHED	Monthly periodical	DATE DIST.	29 Sep 1953
WHERE PUBLISHED	Moscow	NO. OF PAGES	2
DATE PUBLISHED	Apr 1953		
LANGUAGE	Russian	SUPPLEMENT TO REPORT NO.	

THIS IS UNEVALUATED INFORMATION

SOURCE Elektrichestvo, No 4, 1953, p 94.

CAREER OF PROFESSOR N. A. KARYAKIN

M. G. Mal'gin,
V. V. Mezhkov,
and V. V. Kuznetsov

Following is biographic information on Prof Nikolay Alekseyevich Karyakin, well-known searchlight specialist, winner of a Stalin Prize, and Doctor of Technical Sciences, who celebrated his 50th birthday 25 November 1952:

In 1917, Karyakin began to work at the Machine-Building Plant imeni Kalinin. At the same time he was also a student at the evening division of the workers' faculty of Moscow State University. In 1929, he graduated from the Electrical Engineering Faculty of The Moscow Higher Technical School.

Prior to graduation from the Moscow Higher Technical School, Karyakin started to work in 1926 at the photometric laboratory of the State Experimental Electrical Engineering Institute (now the VEI /All-Union Electrical Engineering Institute imeni Lenin/). All Karyakin's subsequent activities have been closely connected with the development of Soviet illuminating engineering and, particularly, searchlight construction. Through Karyakin's initiative and under his leadership, a specialized searchlight laboratory was set up at the VEI.

Using and developing the method of elementary reflections proposed by V. N. Chikolev, Karyakin worked out a structural theory of the formation of light rays for all possible optical systems. His work in this field is widely known to Soviet illuminating engineers and has provided a reliable basis for the calculation and design of different types of searchlights by our industry. His work is of great importance in the analysis of lens optics, including the analysis of pressed lenses.

Karyakin's numerous studies of electric-arc lamps with carbon electrodes clarified the physics of the high-intensity arc and demonstrated that the theories of a number of foreign scientists were erroneous. Karyakin

STAT

CLASSIFICATION RESTRICTED

STATE		NAVY		NSRB		DISTRIBUTION							
ARMY		AIR		FBI									

STAT

wrote articles on these questions for the periodical Elektrichestvo, and his monograph, The High-Intensity Carbon Arc (Ugol'naya duga vysokoy intensivnosti), is the major work in this branch of engineering.

In addition to working out the theoretical problems of arc lamps, Karyakin made a series of high-intensity searchlight carbons of different power ratings which had better electrical and illuminating characteristics than those used earlier. For developing and setting up production of new high-intensity searchlight carbons, Karyakin was awarded a Stalin Prize in 1946.

Karyakin works at the Scientific Research Cinematography Institute in the field of motion-picture illuminating engineering. This branch of engineering has expanded greatly since the advent of color motion pictures.

Karyakin has done considerable pedagogical work in addition to his scientific work. Since 1931 he has been supervisor of searchlight specialization at the MEI (Moscow Power Engineering Institute imeni Molotov), where he gives a basic course in the theory of searchlights.

In his years of scientific and pedagogical activity, Karyakin has created a school of Soviet searchlight specialists and has laid the basic pattern for the development of searchlight construction. A number of his pupils occupy leading posts in the searchlight industry and at scientific research organizations.

Karyakin actively participates in the life of the scientific community as a member of VNITOE (All-Union Scientific and Technical Society of Power Engineers) and of the Presidium of the Illuminating Engineering Commission, Academy of Sciences USSR.

When the All-Union Scientific Research Illuminating Engineering Institute was founded in 1951, Karyakin was appointed deputy director (scientific).

The state has shown its appreciation of Karyakin's work by awarding him the Order of Lenin and Order of the Labor Red Banner.

- E N D -

STAT